

Claims:

What is claimed is:

1. A linear opto-frequency chirp amount variable apparatus, characterized in that it comprises a pair of dielectric multilayer film mirrors arranged so that their mirror surfaces extend parallel, and are opposed, to each other, and a movable mirror which is disposed in a space defined between the two dielectric multilayer film mirrors and which is inclined at a given inclination and movable in a given movable direction, wherein

said given inclination of the movable mirror is an inclination such that an incident light that is incident obliquely from one end of the space defined between the two dielectric multilayer film mirrors and is then allowed to reflect on and between them a plurality of times and is reflected by the movable mirror into a direction parallel to said dielectric multilayer film mirror surfaces in an incidence plane defined by said incident light and a plane-normal of said dielectric multilayer film mirror and towards said one end, and

said given movable direction is a direction that is parallel to said dielectric multilayer film mirror surfaces and extends in said incidence plane,

whereby moving said movable mirror forwards and backwards in said movable direction changes the amount of a chirp to be imparted to said incident light as an input light.

2. A linear opto-frequency chirp amount variable apparatus, characterized in that it comprises a pair of dielectric multilayer film mirrors arranged so that their mirror surfaces extend parallel, and are opposed, to each other, and a first and a second movable mirror which are disposed in a space defined between the two dielectric multilayer film mirrors and each of which is inclined at a given inclination and movable in a given movable direction, wherein

said given inclination of the first movable mirror is an inclination such that an incident light that is incident parallel to said dielectric multilayer film mirror surfaces from one end of the space

defined between said multilayer film mirrors is reflected by the first movable mirror so as to reflect on and between said mirror surfaces a plurality of times in an incidence plane defined by said incident light and a plane-normal of said dielectric multilayer mirror,

said given inclination of the second movable mirror is an inclination such that said incident light having reflected a plurality of times as aforesaid is reflected by the second movable mirror into a direction parallel to said dielectric multilayer film mirror surfaces in said incidence plane and towards the other end of said space,

said given movable direction is a direction that is parallel to said dielectric multilayer film mirror surfaces and extends in said incidence plane,

whereby moving said first or second movable mirror forwards or backwards in said movable direction to change the distance between them changes the amount of a chirp to be imparted to said incident light as an input light.

3. A linear opto-frequency chirp amount variable apparatus, characterized in that it comprises a pair of dielectric multilayer film mirrors arranged so that their mirror surfaces extend parallel, and are opposed, to each other; a fixed mirror disposed in a space defined between the two dielectric multilayer film mirrors at a center of the space, the fixed mirror having a first and a second reflecting surface each of which is inclined at a given inclination; and a first and a second movable mirror which are disposed at opposite sides of the fixed mirror, respectively, and each of which is movable in a given movable direction, wherein

said given inclination of the first reflecting surface of said fixed mirror is an inclination such that an incident light that is incident parallel to said dielectric multilayer film mirror surfaces from one end of the space defined between said two dielectric multilayer film mirrors is reflected by said first reflecting surface so as to reflect on and between said dielectric multilayer film mirrors a plurality of times in an incidence plane defined by said incident light and a plane-normal of said dielectric multilayer mirror surface,

said given inclination of the first movable mirror is an inclination such that the incident light having reflected a plurality of times as aforesaid is reflected by said first movable mirror into a direction that is parallel to said dielectric multilayer film mirror surfaces and extends in said incidence plane, a plurality of times towards said second movable mirror,

said give inclination of the second movable mirror is an inclination such that the light having reflected from said first movable mirror is reflected by said second movable mirror so as to reflect on and between said dielectric multilayer film mirrors a plurality of times in said incidence plane,

said inclination of the second reflecting surface of said fixed mirror is an inclination such that the light from said second movable mirror, upon having reflected a plurality of times as aforesaid, is reflected by said second reflecting surface into a direction that is parallel to said dielectric multilayer film mirror surfaces in said incidence plane and towards the other end of said space, and

said given movable direction is a direction that is parallel to said dielectric multilayer film mirror surfaces and extends in said incidence plane,

whereby moving said first or second movable mirror forwards or backwards in said movable direction to change the distance between them changes the amount of a chirp to be imparted to said incident light as an input light.